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Subject: Re: Divide By Zero error  
Posted by [Craig Markwardt](#) on Mon, 12 Nov 2001 23:03:34 GMT  
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Stein Vidar Hagfors Haugan <shaugan@esa.nascom.nasa.gov> writes:

> Nigel Wade <nmw@ion.le.ac.uk> writes:  
>  
>> Paul Manusiu wrote:  
>>  
>>> What is the log of zero ??  
>>>  
>>> Logan Lindquist wrote:  
>>>  
>>> What is this NaN  
>>>> business and why am I getting Infinity?  
>>  
>> Also, what is the log of a negative number?  
>>  
>> --  
>> -----  
>> Nigel Wade, System Administrator, Space Plasma Physics Group  
>  
> Hey, someone else in the Space Plasma Physics dept might tell you  
> that  $\text{alog}(-1)$  should return  $\text{complex}(0, \pm i\pi)$  !  
>  
> 
$$e^{-i\pi} + 1 = 0$$

Which agrees with the result of IDL, allowing for round-off errors:

```
IDL> print, exp(-dcomplex(0,!dpi)) + 1d  
( 0.0000000, -1.2246064e-16)
```

Craig

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